

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-18. (Cancelled)

19. (Currently Amended) A method of replacing a shaft of a joint prosthesis having a body, a head, and a shaft after the joint prosthesis has been implanted in a patient, wherein the body is coupled to the head and the shaft has an outer surface adapted to interface with an intramedullary canal of the patient, comprising:

creating an access aperture in the patient for access to the joint prosthesis;

removing the shaft from the patient without removing both the body and the head from the patient and without decoupling the head from the body;

inserting a replacement shaft into the patient;

coupling the replacement shaft to the body;

locking the replacement shaft into place in the patient; and

closing the access aperture.

20. (Previously Presented) The method of claim 19, wherein the body has an aperture configured to receive the shaft or the replacement shaft and wherein the coupling step includes inserting the replacement shaft into the aperture of the body.

21. (Previously Presented) The method of claim 20, further comprising coupling an insert to the body, the insert extending at least partially into the aperture of the body.

22. (Original) The method of claim 19, wherein the replacement shaft is an intramedullary nail.

23. (Original) The method of claim 19, wherein the replacement shaft is longer than the shaft.

24-41. (Cancelled)

42. (Currently Amended) A joint prosthesis system for implantation in a patient, comprising:
a body having a first portion, a second portion, and a central canal, wherein the central
canal extends through the second portion of the body;

a head coupled to the first portion of the body, wherein the central canal extends through
the second portion of the body at a position such that access is permitted to an end of the central
canal nearest the head when the head is coupled to the body; and

a plurality of modular shafts including a first shaft coupled to the body, the first shaft
extending through the central canal and configured to extend into an intramedullary canal of a
bone of the patient and a second replacement shaft, wherein the first shaft has an outer surface
adapted to interface with the intramedullary canal of the patient, and further wherein the first
shaft is interchangeable after implantation of the prosthesis by removing the first shaft from the
intramedullary canal and replacing the first shaft with the second replacement shaft without
dislodging both the body and the head from the patient.

43. (Previously Presented) The joint prosthesis of claim 42, wherein the first shaft is coupled
to the body via insertion of the shaft through an end of the central canal nearest an articular
surface of the prosthesis and the first shaft is removed from the body by reversing the direction of
insertion.

44. (Previously Presented) The joint prosthesis of claim 43, wherein the shaft is coupled to
the body via a taper lock between the shaft and the body.

45. (Previously Presented) The joint prosthesis of claim 44, wherein the taper lock is a
Morse taper lock.

46. (Previously Presented) The joint prosthesis of claim 42, wherein the joint prosthesis is
configured to replace a hip joint.

47. (Previously Presented) The joint prosthesis of claim 42, wherein the joint prosthesis is
configured to replace a shoulder joint.

48. (Previously Presented) The joint prosthesis of claim 42, wherein the second replacement shaft is an intramedullary nail.

49. (Previously Presented) The joint prosthesis of claim 42, wherein the second replacement shaft is longer than the first shaft.

50. (Previously Presented) The joint prosthesis of claim 42, further comprising an insert coupled to the body and extending at least partially into the central canal.

51. (Previously Presented) The joint prosthesis of claim 50, wherein the insert is screwed into the central canal.

52. (Currently Amended) A modular joint prosthesis having an articular surface for implantation in a patient, comprising:

a body having a first portion, and a second portion, the first portion of the body coupled to the articular surface; and

a shaft coupled to the second portion of the body and configured to extend into a long bone of the patient, the shaft having an outer surface adapted to interface with an inner surface of the long bone of the patient;

wherein the shaft may be removed from the patient after implantation of the prosthesis without also removing both the body and the articular surface from the patient and without decoupling the body from the articular surface.

53. (Previously Presented) The modular joint prosthesis of claim 52, further comprising a central canal in the body in which the shaft is received.

54. (Previously Presented) The modular joint prosthesis of claim 53, wherein the shaft is coupled to the body via insertion of the shaft through an end of the central canal nearest the articular surface and the shaft is removed from the body by reversing the direction of insertion.

55. (Previously Presented) The modular joint prosthesis of claim 54, wherein the shaft is coupled to the body via a taper lock between the shaft and the body.

56. (Previously Presented) The modular joint prosthesis of claim 53, further comprising an insert coupled to the body and extending at least partially into the central canal.

57. (Previously Presented) The modular joint prosthesis of claim 56, wherein the insert is screwed into the central canal.

58. (Previously Presented) The modular joint prosthesis of claim 52, wherein the joint prosthesis is configured to replace a hip joint.

59. (Previously Presented) The modular joint prosthesis of claim 52, wherein the joint prosthesis is configured to replace a shoulder joint.

60. (Currently Amended) A modular joint prosthesis system, comprising:
a body having a proximal segment, and a distal segment;
an articular surface coupled to the proximal segment of the body; and
a plurality of modular shafts comprising a first shaft configured to extend into a bone and configured to be coupled to the distal segment of the body and a second replacement shaft configured to be coupled to the distal segment of the body, wherein the first shaft has an outer surface adapted to contact an inner surface of the bone, and further wherein the second replacement shaft is used to replace the first shaft in the bone after implantation of the prosthesis into a patient without first removing both the body and the articular surface from the patient and without decoupling the articular surface from the body.

61. (Previously Presented) The modular joint prosthesis system of claim 60, wherein the first shaft is coupled to the body via insertion of the first shaft through an end of a central canal in the body nearest the articular surface and the shaft is removed from the body by reversing the direction of insertion.

62. (Previously Presented) The modular joint prosthesis system of claim 61, wherein the second replacement shaft is coupled to the body via insertion of the second replacement shaft through the end of the central canal nearest the articular surface.
63. (Previously Presented) The modular joint prosthesis system of claim 60, wherein the first shaft is coupled to the body via a taper lock between the first shaft and the body.
64. (Previously Presented) The modular joint prosthesis system of claim 63, wherein the taper lock is a Morse taper lock.
65. (Previously Presented) The modular joint prosthesis system of claim 60, further comprising an insert coupled to the body.
66. (Previously Presented) The modular joint prosthesis system of claim 65, wherein the insert is screwed into the central canal.
67. (Previously Presented) The modular joint prosthesis system of claim 60, wherein the joint prosthesis is configured to replace a hip joint.
68. (Previously Presented) The modular joint prosthesis system of claim 60, wherein the joint prosthesis is configured to replace a shoulder joint.
69. (Previously Presented) The modular joint prosthesis system of claim 60, wherein the second replacement shaft is an intramedullary nail.
70. (Previously Presented) The modular joint prosthesis system of claim 60, wherein the second replacement shaft is longer than the first shaft.
71. (Previously Presented) The modular joint prosthesis system of claim 60, further comprising a shaft removal device configured to be coupled to the first shaft.
72. (Previously Presented) The modular joint prosthesis system of claim 71, wherein the first shaft includes a threaded recess and the shaft removal device includes a threaded portion

configured to be screwed into the threaded recess to couple the shaft removal device to the first shaft.

73. (Previously Presented) The modular joint prosthesis system of claim 60, further comprising a head coupled to the proximal segment of the body, the head having the articular surface.

74. (Previously Presented) The joint prosthesis of claim 73, further comprising a neck connected to the proximal segment of the body, wherein the head is coupled to the body via the neck.

75. (Currently Amended) An artificial joint system, comprising:
a body having a first portion, a second portion, and a central canal defined therein, the central canal positioned through the second portion of the body;

a prosthetic head coupled to the first portion of the body;

a plurality of modular shafts including a first shaft extending at least partially through the central canal and an intramedullary nail configured to be inserted into the central canal to replace the first shaft, wherein the first shaft has an outer surface adapted to interface with an intramedullary canal;

a locking element configured to be screwed into the central canal to lock the first shaft into place; and

a shaft removal device configured to remove the first shaft from the central canal;

wherein the first shaft is removable from the central canal without removing both the body and the prosthetic head from the patient and without decoupling the prosthetic head from the body, and further wherein the intramedullary nail is locked into place by the locking element after removal of the first shaft, whercin the intramedullary nail is longer than the first shaft.

76. (New) The method of claim 19, wherein the body includes a central canal that extends through the body, and further wherein the step of removing the shaft includes accessing the shaft via an end of the central canal nearest the head.